

CLAIMS

1. An apparatus for transmitting a stream of information bytes comprising:
means for receiving a message specifying a radio link protocol (RLP) round-trip time (RTT) estimate; and
means for conducting an RLP communication session using said RTT estimate to determine negative acknowledgment (NAK) message timing.
2. The apparatus of claim 1 wherein said message is a service negotiation message.
3. The apparatus of claim 1 wherein said message is a Service Connect Message.
4. The apparatus of claim 3 wherein said Service Connect Message further specifies a NAK scheme, and further comprising:
means for applying said NAK scheme in transmissions.
5. The apparatus of claim 1 further comprising:
means for negotiating, using service negotiation messages, a NAK scheme used during said subsequent RLP communication session.
6. The apparatus of claim 1 further comprising:
means for negotiating, using service negotiation messages, encryption parameters used during said subsequent RLP communication session.
7. The apparatus of claim 1 wherein said message is a Service Request Message.
8. The apparatus of claim 1 wherein said message is a Service Response Message.
9. The apparatus of claim 1 wherein said message is a General Handoff

Direction Message.

10. The apparatus of claim 1 wherein said message is a Universal Handoff Direction Message.

11. An apparatus for transmitting a stream of information bytes comprising:
means for sending a message specifying a radio link protocol (RLP) round-trip time (RTT) estimate; and
means for conducting an RLP communication session using said RTT estimate to determine negative acknowledgment (NAK) message timing.

12. The apparatus of claim 11 wherein said message is a service negotiation message.

13. The apparatus of claim 11 wherein said RTT estimate is specified by an operator of a base station and is used to determine NAK message timing RLP communication sessions between one or more subscriber stations and said base station.

14. The apparatus of claim 11 wherein said message is a Service Connect Message.

15. The apparatus of claim 11 wherein said message is a Service Request Message.

16. The apparatus of claim 11 wherein said message is a Service Response Message.

17. The apparatus of claim 11 wherein said message is a General Handoff Direction Message.

18. The apparatus of claim 11 wherein said message is a Universal Handoff Direction Message.

19. The apparatus of claim 14 wherein said Service Connect Message further specifies a NAK scheme, and further comprising:

means for using applying said NAK scheme in transmissions.

20. The apparatus of claim 12 further comprising:

means for negotiating, using service negotiation messages, a NAK scheme used during said subsequent RLP communication session.

21. The apparatus of claim 20 further comprising:

means for negotiating, using service negotiation messages, encryption parameters used during said subsequent RLP communication session.

22. An apparatus for transmitting a stream of information bytes comprising:

means for establishing a first radio link protocol (RLP) round-trip time (RTT) estimate during service negotiation; and

means for using said first RLP RTT estimate to determine negative acknowledgment (NAK) message timing in a subsequent RLP communication session.

23. The apparatus of claim 22 further comprising:

means for measuring the delay between transmitting a NAK frame and receiving a first corresponding retransmit frame to form a second RLP RTT estimate; and

means for updating said first RLP RTT estimate based on said second RLP RTT estimate.

24. The apparatus of claim 23 wherein said means for updating further comprises performing a weighted average of said first RLP RTT estimate and said second RLP RTT estimate.

25. The apparatus of claim 23 wherein said means for updating further comprises replace said first RLP RTT estimate with said second RLP estimate based on receipt of the first retransmit frame of said RLP communication session.

26. An apparatus for transmitting a stream of information bytes comprising:
- means for performing a 3-way handshake to generate a first round-trip time (RTT) estimate associated with a first radio link protocol (RLP) communication session;
 - means for establishing a second RTT estimate associated with a second RLP communication session, wherein said second RTT estimate is based on said first RTT estimate, and wherein said second RTT estimate is established during service negotiation; and
 - means for using said second RLP RTT estimate to determine negative acknowledgment (NAK) message timing in a subsequent RLP communication session.
27. The apparatus of claim 26 wherein said means for performing a 3-way handshake is performed between a base station and a subscriber station and means for establishing a second RTT estimate is performed between said base station and said subscriber station.
28. The apparatus of claim 26 wherein said means for performing a 3-way handshake is performed between a base station and a first subscriber station and means for establishing a second RTT estimate is performed between said base station and a second subscriber station.
29. The apparatus of claim 26 wherein said second RTT estimate is generated by adding a predetermined guard time to said first RTT estimate.